WHAT IS CLAIMED IS:

1. A method of determining wood pulping parameters in a boron-containing alkaline wood pulping liquor sample comprising the steps of:

(i) subjecting a first aliquot portion of the boron-containing sample to a primary acid titration analysis to derive multiple equivalence points at different respective pH values;

(ii) subjecting a second aliquot portion of the boron-containing sample to an analysis by an analytical method other than acid titration, to determine the quantitative presence of boron or sulfide ions therein; and then

(iii) deriving algorithmically at least one of said wood pulping parameters based on the combined analytical results of steps (i) and (ii), thereby overcoming interference due to the presence of boron in the sample.

2. The method of claim 1, wherein step (ii) includes analyzing the sample for boron content using colorimetry or atomic spectroscopy.

3. The method of claim 1, wherein step (ii) includes analyzing the sample for sulfide ion content using a secondary silver sulfide precipitation titration analysis.

4. The method of claim 1, wherein said wood pulping parameters are selected from the group consisting of Effective Alkali, Active Alkali, Total Titratable Alkali excluding Metaborate, Total Titratable Alkali including Metaborate, Sulfidity of the green liquor, Sulfidity of the white liquor, Causticizing Efficiency, Activity and Causticity.